



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,583	12/17/2001	William R. Lehman	T3392-000000	5426

7590 01/29/2003

Edward J. Kondracki, Esq.  
MILES & STOCKBRIDGE P.C.  
Suite 500  
1751 Pinnacle Drive  
McLean, VA 22102-3833

EXAMINER

PHAM, MINH CHAU THI

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 01/29/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 10/015,583	Applicant(s) LEHMAN	
Examiner PHAM	Group Art Unit 1724	

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED [35 U.S.C. § 133].
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- Amended*
- ☒ Responsive to communication(s) filed on 11/04/02
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 111; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-37 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-37 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1724

*Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2).

Dastoli et al disclose an air decontamination system comprising a sealed room having an inlet, a vacuum unit which creates a negative pressure within the room by suctioning air through the air inlet into the room and then from the room into an inlet of the vacuum unit wherein the vacuum unit creates a laminar flow of air within the room, and a filter unit which filters air entering the inlet of the vacuum unit. Claims 1 and 12 differ from the disclosure of Dastoli et al in that the system has a work surface disposed in the sealed area and air being suctioned downwardly through the work surface. Thomas et al disclose a work surface disposed in the sealed area and air being suctioned downwardly through the work surface. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt a work surface wherein air is suctioned downwardly through the work surface as taught by Thomas et al in the decontamination system of Dastoli et al since the laminar flow of filtered air is passed

Art Unit: 1724

from the top to the bottom of the enclosure to sweep off contaminants from the work surface thus providing a safe environment for the user working at the work station.

3. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 2, and further in view of Long et al (5,713,791; col. 2, lines 38-46 and lines 54-64; col. 3, lines 5-21 and lines 31-55).

Claims 2-6 call for the sealed room having a modular construction with removable walls and at least one transparent wall. Long et al disclose a clean room having a modular construction with removable walls and at least one transparent wall. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with modular construction with removable walls and at least one transparent wall as taught by Long et al to provide an effective mechanism to transport products between two separate clean room environments that would eliminate the requirements of a decontamination station for the products before they can be reintroduced into the second clean room environment.

4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2),

Art Unit: 1724

as applied supra to paragraph 2, and further in view of Renz (6,358,139; 9 in Fig. 1; col. 2, lines 21-25).

Claims 7-9 call for the an air lock room connected to the sealed room. Renz discloses an air lock room (9) connected to the sealed room wherein the air inlet extends between the sealed room and the air lock room and wherein the air suctioned through the air inlet resides within the air lock room, and another air inlet which allows air to pass from the outside source into the air lock room. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with an air lock room as taught by Renz so that the fresh air flowing through the filter reaches directly the sealed room and eliminates most of the contaminants from the air stream.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 2, and further in view of Chornenky et al (6,185,294 B1; col. 1, lines 39-45).

Claim 10 calls for an intercom system which allows a person outside to communicate with a person inside the room. Chornenky et al disclose intercom system which allows a person outside to communicate with a person inside the room. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the intercom system as taught by Chornenky et al in the sealed room of Dastoli et al so that a person working inside the

Art Unit: 1724

sealed room can communicate with others in the outside without having physically to go out of the sealed room and be contaminated.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 2, and further in view of Hofstra et al (5,085,134; col. 6, lines 32-42).

Claim 11 calls for a warning device which provides an indication that the sealed room is in use. Hofstra et al disclose a warning device which provides an indication that the smoker's booth is in use. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with a warning device as taught by Hofstra et al so that the device would detect the presence of a user and let others know that the sealed room is in use.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 2, in view of Kinkead et al (5,626,820; 14, 24, 46, 48 & 50 in Fig. 1A; col. 5, lines 15-26; col. 6, lines 9-17).

Claims 13 and 14 call for a multi-layered filtration system to remove various ranges of particle sizes and a chemical filter. Kinkead et al disclose a multi-layered filtration system of a

Art Unit: 1724

clean room wherein the filtration system removes various ranges of particle sizes and a chemical filter. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the multi-layered filtration system as taught by Kinkead et al in the sealed room of Dastoli et al since the filtration system removes not only the particles from the air stream but also the chemical contaminants produced by the processing station.

8. Claims 15-18, 24, 27, 29 and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), and further in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2).

Malatesta discloses a method and apparatus of mail sorting comprising the steps of placing a piece of mail in the mail sorting machine and assembling the mail sorting. Claims 15-18, 24, 27, 29 and 33-37 differ from the disclosure of Malatesta in that the mail sorting station does not have a sealed room around the station. Dastoli et al disclose an air decontamination system comprising a sealed room having an inlet, a vacuum unit which creates a negative pressure within the room by suctioning air through the air inlet into the room and then from the room into an inlet of the vacuum unit wherein the vacuum unit creates a laminar flow of air within the room, and a filter unit which filters air entering the inlet of the vacuum unit. Thomas et al disclose a work station wherein laminar air is flowing downwardly from the top to bottom. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an air decontamination sealed room as taught by Dastoli et al in combination with a work station as

Art Unit: 1724

taught by Thomas et al around the mail sorting apparatus of Malatesta since the sealed room provides a safe and dust free environment for the postal workers to work in.

9. Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), and further in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 8, and further in view of Long et al (5,713,791; col. 2, lines 38-46 and lines 54-64; col. 3, lines 5-21 and lines 31-55).

Claims 19-23 call for the sealed room having a modular construction with removable walls and at least one transparent wall. Long et al disclose a clean room having a modular construction with removable walls and at least one transparent wall. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al and Thomas et al with modular construction with removable walls and at least one transparent wall as taught by Long et al to provide an effective mechanism to transport products between two separate clean room environments that would eliminate the requirements of a decontamination station for the products before they can be reintroduced into the second clean room environment.

10. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), and further in view of Thomas et al (5,083,558; Abstract; 30,



Art Unit: 1724

42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 8, and further in view of Renz (6,358,139; 9 in Fig. 1; col. 2, lines 21-25).

Claims 30-32 call for the an air lock room connected to the sealed room. Renz discloses an air lock room (9) connected to the sealed room wherein the air inlet extends between the sealed room and the air lock room and wherein the air suctioned through the air inlet resides within the air lock room, and another air inlet which allows air to pass from the outside source into the air lock room. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al and Thomas et al with an air lock room as taught by Renz so that the fresh air flowing through the filter reaches directly the sealed room and eliminates most of the contaminants from the air stream.

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), and further in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 8, and further in view of Chornenky et al (6,185,294 B1; col. 1, lines 39-45).

Claim 25 calls for an intercom system which allows a person outside to communicate with a person inside the room. Chornenky et al disclose intercom system which allows a person outside to communicate with a person inside the room. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the intercom system as taught by Chornenky et al in the sealed room of Dastoli et al and Thomas et al so that a person

Art Unit: 1724

working inside the sealed room can communicate with others in the outside without having physically to go out of the sealed room and be contaminated.

12. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), and further in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 8, and further in view of Hofstra et al (5,085,134; col. 6, lines 32-42).

Claim 26 calls for a warning device which provides an indication that the sealed room is in use. Hofstra et al disclose a warning device which provides an indication that the smoker's booth is in use. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al and Thomas et al with a warning device as taught by Hofstra et al so that the device would detect the presence of a user and let others know that the sealed room is in use.

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), and further in view of Thomas et al (5,083,558; Abstract; 30, 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2), as applied supra to paragraph 8, and further in view of Kinkead et al (5,626,820; 14, 24, 46, 48 & 50 in Fig. 1A; col. 5, lines 15-26; col. 6, lines 9-17).

Art Unit: 1724

Claim 28 calls for a multi-layered filtration system to remove various ranges of particle sizes and a chemical filter. Kinkead et al disclose a multi-layered filtration system of a clean room wherein the filtration system removes various ranges of particle sizes and a chemical filter. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the multi-layered filtration system as taught by Kinkead et al in the sealed room of Dastoli et al and Thomas et al since the filtration system removes not only the particles from the air stream but also the chemical contaminants produced by the processing station.

***Response to Amendment***

14. Applicant's arguments filed on November 4, 2002 have been fully considered but they are not persuasive.

Applicant argues that none of the cited prior arts discloses "a work surface disposed in a sealed area and air being suctioned downwardly through the work surface". The Examiner newly introduces a secondary Thomas et al to show a work surface disposed in a sealed area and air being suctioned downwardly through the work surface, as claimed in independents 1 and 15 (see 42 & 50 in Fig. 1; col. 4, lines 41-46 and line 58 through col. 5, line 2). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt a work surface wherein air is suctioned downwardly through the work surface as taught by Thomas et al in the decontamination system of Dastoli et al since the laminar flow of filtered air is passed

Art Unit: 1724

from the top to the bottom of the enclosure to sweep off contaminants from the work surface thus providing a safe environment for the user working at the work station.

15. Applicant's arguments with respect to claims 1-37 have been thoroughly considered but are moot in view of the new ground(s) of rejections as discussed above.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau Pham whose telephone number is (703) 308-1605. The examiner can normally be reached on Monday-Friday (except Wednesday) from 7:15 a.m. to 5:45 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Simmons, can be reached on (703) 308-1972. The fax phone number for this Group is (703) 872-9310 (non-finals) or (703) 872-9311 (after-finals).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



**Minh-Chau Pham**

**Patent Examiner**

January 24, 2003